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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,826	03/30/2001	Aurobindo Tripathy	042390P11023	6139

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EXAMINER

BUI, KIEU OANH T

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/823,826	TRIPATHY, AUROBINDO	
	<b>Examiner</b>	<b>Art Unit</b>	
	KIEU-OANH T BUI	2611	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawamura et al. (U.S. Patent No. 6,728,271 B1).

Regarding claim 1, Kawamura discloses “a method of storing and playing a broadcast stream, the method comprising: separating channel packets and associated packets for a channel segment from a multiplexed stream; attaching a time stamp to each of the channel packets; storing the channel packets and associated packets; comparing the time stamp of each channel packet to a ready time; and transferring channel data from the channel packet to a player device for presentation to a user, if the time stamp of the channel packet equals the ready time”, i.e., Figure 1 discloses a digital receiving apparatus for storing and playing a broadcast stream from either a satellite, a standard broadcast system or a coaxial cable; the multiplexed stream, from various sources as noted, is received and separated in transport channel packet (as shown in Fig. 2A), and transport packet is separated to video streams and associated audio streams and private streams with time stamps assigned, col. 6/line 62 to col. 7/line 11, wherein PES is packetized

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elementary stream comprising the video, audio, and private streams, as disclosed in col. 6/lines 22-38; and the time stamps are compared using clock supply controlling unit (as in Fig. 7 & 8) within the stream demultiplexing device 26 for providing a ready time presentation to the user (as shown in Fig. 1) based on time stamps of channel packets, see col. 3/line 3 to col. 4/line 28 for the entire process in demultiplexing streams for the user/viewer.

As for claims 2 and 3, Kawamura discloses further “including initializing a clock to the time stamp of a first packet” and “wherein the ready time is the current time of the clock”, i.e., the clock generator provides the current time of the clock and provides a synchronous clock signal as a reference clock time to time stamp a first packet and the others (col. 7/lines 35-66).

As for claim 4, Kawamura discloses including “calculating the ready time based on the difference of the time stamp of a first packet and a clock time”, i.e., the timing charts of Figures 12 & 13 shows the process on how clock supply control unit 25 uses the comparator 45 in determining the difference or mismatch in tuning identifiers, header processing or payload processing before providing to the user based on time stamps and the clock time, see col. 14/line 64 to col. 15/line 33.

As for claim 5, Kawamura further teaches “wherein if the time stamp does not equal the ready time, further including determining the time remaining for the time stamp to equal the ready time and the transferring is delayed for the time remaining” (Fig. 5, for a delay time at 816, and col. 10/lines 11-35).

As for claim 6, Kawamura discloses “wherein the storing is by direct memory access” (Fig. 3/item 20 for DMA manager for direct memory access, and col. 10/lines 39-49).

As for claim 7, Kawamura discloses “including interrupting a processor with the storing”, i.e., DMA connects to microprocessor 23, by storing data into SDRAM 19, DMA manager needs to interrupt the processor 23 for storing, col. 7/lines 22-34, and col. 10/line 36 to col. 11/line 15).

As for claims 8 and 9, Kawamura teaches “including removing the channel packets from storage by direct memory access” and “including interrupting a processor with the removing of the channel packets”, i.e., this process regarding as the reading or retrieval data packets from SDRAM 19 by using DMA access with the interruption of the processor 23 as discussed above, see col. 7/lines 22-34, and col. 10/line 36 to col. 11/line 15 for DMA access involves reading and writing data packets to SDRAM storage under the control of microprocessor 23.

As for claim 10, Kawamura further discloses “including retrieving a descrambling key from an associated packet for a channel packet prior to transferring the channel data”, i.e., Figure 17/item 51 shows a decrypting unit for decrypting or descrambling of encrypting/scrambling key from the broadcast system prior to or before transferring the channel data, see col. 18/lines 7-42).

Regarding claim 11, Kawamura discloses “a broadcast processing system for storing and playing data, comprising: a) demultiplexer to separate channel packets and associated packets for a channel segment from a multiplexed stream; b) time stamp unit to attach a time stamp to each of the channel packets; c) packet storage unit to store the channel packets and associated packets; d) time comparator to compare the time stamp of each channel packet to a ready time; and e) transfer interface to transfer channel data from the channel packet to a player device for presentation to a user, if the time stamp of the channel packet equals the ready time” (see claim 1 above, refer to Figs. 1 & 3, with demultiplexer device 26, time stamp assignment is done within the demultiplexing unit for each PES as noted earlier, SDRAM 19 as a packet storage unit, time

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comparator is performed using clock supply control unit 25, and DMA manager for transfer interface in transferring channel data as discussed earlier.

As for claims 12-17, claims 18-27 for “a computer readable medium having stored therein a plurality of sequences of executable instructions, which, when executed by a processor, cause the system to separate channel packets and associated packets for a channel segment from a multiplexed stream; attach a time stamp to each of the channel packets; store the channel packets and associated packets...” as described earlier; and claims 28-30 for “a method of storing and playing a broadcast stream” with same limitations as addressed earlier are rejected for the reasons given in the scope of claims 1-11 as disclosed not limited to the cited paragraphs above but also to the entire reference of Kawamura.

### **Conclusion**

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fuji et al. (US Pat. No.5,898,695) disclose a decoder for compressed and multiplexed video and audio data.

Kato (US Pat. No.6,404,711 B1) discloses a system including comparing a separated time stamp to a generated timing signal and controlling a timing signal on the basis of continuity of time stamps.

Knutson et al. (US Pat. No.6,788,710 B1) disclose a auxiliary data insertion in a transport datastream.

Inoue et al. (US Pat. No.5,832,085) disclose a method and apparatus storing multiple protocol, compressed audio video data.

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4. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to: (703) 872-9306, (for Technology Center 2600 only)**

*Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (703) 305-0095. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:30 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant, can be reached on (703) 305-4755.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Krista Bui  
Art Unit 2611  
March 8, 2005

  
KRISTA BUI  
PATENT EXAMINER